

Please AMEND the CLAIMS as follows:

1. (Currently Amended) In a first access point, a method of supporting mobility for a node that does not support Mobile IP, comprising:
 - receiving access point information from a second access point;
 - storing the access point information received from the second access point such that a list of active access points is updated to include the access point information received from the second access point, the list of active access points including access point information associated with one or more active access points, the access point information received from the second access point including information identifying an access point subnet and a gateway associated with the second access point; and
 - sending the access point information received from the second access point to a third access point that supports Mobile IP to notify the third access point that the second access point is an active access point, thereby enabling the third access point to compare a received data packet with the access point subnet to determine whether to send a registration request on behalf of the node using the gateway as the node's Home Agent.
2. (Previously Amended) The first access point as recited in claim 16, wherein the first access point and the second access point support Mobile IP.
3. (Currently Amended) The first access point as recited in claim 16, wherein the first access point is responsible for sending the ~~received~~ access point information received from the second access point to one or more additional access points.

4. (Currently Amended) The first access point as recited in claim 16, wherein the first access point is responsible for sending the ~~received~~ access point information received from the second access point to one or more active access points.

5. (Previously Amended) The first access point as recited in claim 16, wherein the second access point is an active access point.

6. (Previously Amended) The first access point as recited in claim 16, wherein the third access point is an active access point.

7. (Currently Amended) The first access point as recited in claim 6, at least one of the processor ~~or and~~ the memory being further ~~adapted~~ configured for:

identifying the third access point in the list of active access points that identifies one or more active access points prior to sending the access point information to the third access point.

8. (Cancelled)

9. (Previously Presented) The first access point as recited in claim 16, wherein the list of active access points comprises an IP address for each of the active access points.

10. (Currently Amended) The first access point as recited in claim 16, at least one of the processor ~~or and~~ the memory being further ~~adapted~~ configured for:

sending access point information for one or more additional access points to the

second access point, the access point information including an access point subnet and a gateway.

11. (Previously Amended) The first access point as recited in claim 16, wherein the access point information further comprises at least one of a netmask and an IP address associated with the second access point.

12. (Previously Amended) The first access point as recited in claim 16, wherein storing the access point information comprises:

storing the access point information in a subnet mapping table including a plurality of entries, each of the plurality of entries being associated with a different access point.

13. (Currently Amended) The first access point as recited in claim 16, at least one of the processor ~~or and~~ the memory being further adapted configured for:

deleting the access point information associated with the second access point if it is determined that the second access point is no longer active; and

instructing the third access point to delete the access point information associated with the second access point.

14. (Currently Amended) The first access point as recited in claim 13, at least one of the processor ~~or and~~ the memory being further adapted configured for:

removing an IP address associated with the second access point from a list of active access points.

15. (Currently Amended) A first access point that supports mobility for a node that does

not support Mobile IP, comprising:

means for receiving access point information from a second access point;

means for storing the access point information received from the second access point

such that a list of active access points is updated to include the access point information

information received from the second access point, the list of active access points including

access point information associated with one or more active access points, the access point

information received from the second access point including information identifying an

access point subnet and a gateway associated with the second access point; and

means for sending the access point information received from the second access point

to a third access point that supports Mobile IP to notify the third access point that the second

access point is an active access point, thereby enabling the third access point to compare a

received data packet with the access point subnet to determine whether to send a registration

request on behalf of the node using the gateway as the node's Home Agent.

16. (Currently Amended) A first access point that supports mobility for a node that does

not support Mobile IP, comprising:

a processor; and

a memory, at least one of the processor ~~or~~ and the memory being ~~adapted~~ configured

for:

receiving access point information from a second access point;

storing the access point information received from the second access point

such that a list of active access points is updated to include the access point

information received from the second access point, the list of active access points

including access point information associated with one or more active access points,

the access point information received from the second access point including

information identifying an access point subnet and a gateway associated with the second access point; and

sending the access point information received from the second access point to a third access point that supports Mobile IP to notify the third access point that the second access point is an active access point, thereby enabling the third access point to compare a received data packet with the access point subnet to determine whether to send a registration request on behalf of the node using the gateway as the node's Home Agent.

17. (Currently Amended) A computer-readable medium storing thereon computer-readable instructions for supporting mobility for a node that does not support Mobile IP in a first access point, comprising:

instructions for storing access point information received from a second access point such that a list of active access points is updated to include the access point information received from the second access point, the list of active access points including access point information associated with one or more active access points, the access point information received from the second access point including information identifying an access point subnet and a gateway associated with the second access point; and

instructions for sending the access point information received from the second access point to a third access point that supports Mobile IP to notify the third access point that the second access point is an active access point, thereby enabling the third access point to compare a received data packet with the access point subnet to determine whether to send a registration request on behalf of the node using the gateway as the node's Home Agent.

18. (Withdrawn) In an Access Point that supports Mobile IP, a method of sending a

mobile IP registration request on behalf of a node that does not support Mobile IP, comprising:

receiving a data packet, the data packet specifying a source address;

determining from the source address whether the node is located on a subnet identical to a subnet of the Access Point;

when it is determined from the source address that the node is located on the subnet identical to the subnet of the Access Point, no Mobile IP service is required on behalf of the node; and

when it is determined from the source address that the node is not located on the subnet identical to the subnet of the Access Point, composing and sending a mobile IP registration request on behalf of the node.

19. (Withdrawn) The method as recited in claim 18, wherein determining from the source address whether the node is located on a subnet identical to a subnet of the Access Point comprises:

comparing the source address with access point information associated with one or more access points, the access point information including an access point subnet.

20. (Withdrawn) The method as recited in claim 19, wherein the access point information further comprises a gateway and wherein the mobile IP registration request specifies the gateway as the node's Home Agent.

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)
24. (Withdrawn) An Access Point that supports Mobile IP, the Access Point being adapted for a sending a mobile IP registration request on behalf of a node that does not support Mobile IP, comprising:
- means for receiving a data packet, the data packet specifying a source address;
 - means for determining from the source address whether the node is located on a subnet identical to a subnet of the Access Point;
 - means for composing and sending a mobile IP registration request on behalf of the node when it is determined from the source address that the node is not located on the subnet identical to the subnet of the Access Point, wherein no Mobile IP service is required on behalf of the node when it is determined from the source address that the node is located on the subnet identical to the subnet of the Access Point.
25. (Withdrawn) An Access Point that supports Mobile IP, the Access Point being adapted for a sending a mobile IP registration request on behalf of a node that does not support Mobile IP, comprising:
- a processor; and
 - a memory, at least one of the processor and the memory being adapted for:
 - receiving a data packet, the data packet specifying a source address;
 - determining from the source address whether the node is located on a subnet identical to a subnet of the Access Point;
 - when it is determined from the source address that the node is located on the subnet identical to the subnet of the Access Point, no Mobile IP service is required on

behalf of the node; and

when it is determined from the source address that the node is not located on the subnet identical to the subnet of the Access Point, composing and sending a mobile IP registration request on behalf of the node.

26. (Withdrawn) A computer-readable medium storing thereon computer-readable instructions for sending a mobile IP registration request on behalf of a node that does not support Mobile IP in an Access Point that supports Mobile IP, comprising:

instructions for receiving a data packet, the data packet specifying a source address;
instructions for determining from the source address whether the node is located on a subnet identical to a subnet of the Access Point; and
instructions for composing and sending a mobile IP registration request on behalf of the node when it is determined from the source address that the node is not located on the subnet identical to the subnet of the Access Point, wherein no Mobile IP service is required on behalf of the node when it is determined from the source address that the node is located on the subnet identical to the subnet of the Access Point.

27. (Withdrawn) In a first access point that supports Mobile IP, a method of supporting mobility for a node that does not support Mobile IP, comprising:

sending a first set of access point information associated with the first access point to one or more access points, the first set of access point information including a first access point subnet and a first gateway associated with the first access point;
receiving a second set of access point information from a second access point, the second set of access point information including a second access point subnet and a second gateway; and

storing the second set of access point information, thereby enabling the first access point to compare a received data packet with the second access point subnet to determine whether to send a registration request on behalf of the node using the second gateway as the node's Home Agent.

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Withdrawn) A first access point that supports Mobile IP, the first access point being adapted for performing a method of supporting mobility for a node that does not support Mobile IP, comprising:

means for sending a first set of access point information associated with the first access point to one or more access points, the first set of access point information including a first access point subnet and a first gateway associated with the first access point;

means for receiving a second set of access point information from a second access point, the second set of access point information including a second access point subnet and a second gateway; and

means for storing the second set of access point information, thereby enabling the first access point to compare a received data packet with the second access point subnet to determine whether to send a registration request on behalf of the node using the second gateway as the node's Home Agent.

42. (Withdrawn) A first access point that supports Mobile IP, the first access point being adapted for supporting mobility for a node that does not support Mobile IP, comprising:

a processor; and

a memory, at least one of the processor and the memory being adapted for:

sending a first set of access point information associated with the first access

point to one or more access points, the first set of access point information including a first access point subnet and a first gateway associated with the first access point;

receiving a second set of access point information from a second access point, the second set of access point information including a second access point subnet and a second gateway; and

storing the second set of access point information, thereby enabling the first access point to compare a received data packet with the second access point subnet to determine whether to send a registration request on behalf of the node using the second gateway as the node's Home Agent.

43. (Withdrawn) A computer-readable medium storing thereon computer-readable instructions for supporting mobility for a node that does not support Mobile IP in a first access point that supports Mobile IP, comprising:

instructions for sending a first set of access point information associated with the first access point to one or more access points, the first set of access point information including a first access point subnet and a first gateway associated with the first access point;

instructions for receiving a second set of access point information from a second access point, the second set of access point information including a second access point subnet and a second gateway; and

instructions for storing the second set of access point information, thereby enabling the first access point to compare a received data packet with the second access point subnet to determine whether to send a registration request on behalf of the node using the second gateway as the node's Home Agent.

44. (Currently Amended) The method as recited in claim 1, further comprising:

receiving a data packet from the node, the data packet specifying a source address;

determining from the source address whether the node is ~~located on~~ currently attached to a subnet identical to a subnet of the first access point;

when it is determined from the source address that the node is ~~located on~~ currently attached to the subnet identical to the subnet of the first access point, no Mobile IP service is required on behalf of the node; and

when it is determined from the source address that the node is not ~~located on~~ currently attached to the subnet identical to the subnet of the first access point, composing and sending a mobile IP registration request on behalf of the node.

45. (Currently Amended) The method as recited in claim 44, wherein determining from the source address whether the node is ~~located on~~ currently attached to a subnet identical to a subnet of the first access point comprises:

comparing the source address with the access point information.

46. (Previously presented) The method as recited in claim 44, wherein the mobile IP registration request specifies the gateway as the node's Home Agent.

47. (Currently Amended) The method as recited in claim 44, wherein determining from the source address whether the node is ~~located on~~ currently attached to a subnet identical to a subnet of the first access point comprises:

ascertaining the access point subnet identical to that of the node; and

determining whether the access point subnet identical to that of the node is different from that of the first access point.

48. (Previously presented) The method as recited in claim 47, further comprising:
when the access point subnet identical to that of the node is different from that of the
first access point, obtaining the access point information including the gateway.

49. (Previously presented) The method as recited in claim 1, further comprising:
sending a request to the second access point for access point information associated
with one or more active access points prior to receiving the access point information from the
second access point, wherein the access point information received from the second access
point includes access point information associated with one or more active access points.

50. (Previously presented) The method as recited in claim 1, further comprising:
receiving a request from the third access point for access point information associated
with one or more active access points, wherein the access point information sent to the third
access point includes access point information associated with one or more active access
points.

51. (Currently Amended) The method as recited in claim 1, further comprising:
receiving a remove message indicating that access point information associated with a
specified access point is to be deleted prior to deleting the ~~set of~~ access point information
associated with the specified access point; and
deleting the access point information associated with the specified access point.

52. (Previously presented) The method as recited in claim 1, further comprising:

sending a remove message to one or more access points indicating that the access point information associated with a specified access point is to be deleted.

53. (Previously presented) The method as recited in claim 1, further comprising:
sending a remove message to the second access point indicating that active access points are to delete the access point information associated with a specified access point.

54. (Previously presented) The method as recited in claim 1, further comprising:
sending access point information associated with the first access point to one or more access points, the access point information associated with the first access point including an access point subnet and a gateway associated with the first access point.

55. (Previously presented) The method as recited in claim 1, wherein the access point information is received from the second access point when the second access point powers up, wherein the access point information received from the second access point indicates that the second access point is active.

56. (Previously presented) The method as recited in claim 1, wherein the access point information received from the second access point indicates that the second access point is active.

57. (Currently Amended) The method as recited in claim 1, wherein the access point information received from the second access point ~~information~~ indicates that one or more access points are active.

58. (Previously presented)The method as recited in claim 1, wherein the access point information does not include information associated with one or more nodes.

59. (Previously presented)The method as recited in claim 1, wherein the access point information does not identify one or more nodes.